

**ON TWO NEW SPECIES OF SPIDERS OF THE
GENUS *Oxyopes* LATREILLE FROM CENTRAL INDIA
(ARACHNIDA: ARANEAE: OXYOPIDAE)**

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ABSTRACT

Two new species of the spiders, *Oxyopes kohaensis* sp. nov.; *Oxyopes boriensis* sp. nov. from Oxyopidae family are described from central India from *Koha and Bori* meadows after two years of resettlement of forest villages.

INTRODUCTION

Spiders of the family Oxyopidae have received very little attention in India. Pocock (1900,1901) described four and three new species of *Oxyopes* and *Peucetia* respectively. Sherriff (1950) redescribed and figured Pococks' species of *Oxyopes* found in the Oriental region. Tikader (1965, 1969, 1970), Biswas (1975) and Gajbe (1992,1999) described thirteen, one and sixteen species respectively. Patel(1978) described a new species of spider of the family Oxyopidae from Gujarat. Gajbe and Gajbe (1995, 1999, 2000) described three species of *Oxyopes*. Sadana and Goel; Sadana and Gupta (1995) described two species. Biswas *et al.* (1995) described five species from West Bengal. Saha and Raychaudhuri (2003) described two species of *Oxyopes*. Gajbe (2008) in his Fauna of India, re-described and re-illustrated forty one species from different parts of India and adjacent countries.

MATERIALS AND METHODS

Situated in the Satpura hill ranges of Central India, Melghat Tiger Reserve lies in Melghat forests of Amravati district in Vidarbha region of Maharashtra, bordering Madhya Pradesh in the North and East. Its area is geographically located as given below:

Latitude	:	Between 21° 15' N and 21° 45' N
Longitude	:	Between 76° 57' E and 77° 30' E
Altitude	:	312 M to 1178 M above MSL.

Melghat Tiger Reserve is a typical representative of Central Indian Highland forming a part of the Biogeographic zone '6 E-Deccan Peninsula'– Central Highlands. This area constitutes forests which are part of world's fifth biologically richest heritage country. The Reserve forms an important corridor between forest areas of Madhya Pradesh and Maharashtra ensuring contiguity of forests in Satpuras.

It beholds one of the viable populations of tigers, the Royal Bengal Tiger, out of 5 surviving tiger species including all the Tiger range countries. Out of 237–240 Tigers in Maharashtra in 2002, 75 - 80 i.e. about 30 % were reported from Melghat Tiger Reserve only.

Three different female spider specimens were collected from Melghats by beating the vegetation like shrub, high herb vegetation, bushes, and small trees and branches. Collected specimens were photographed by Fuji camera with macrolens.

Collected specimens are transferred to 70% alcohol. Identification is done on the basis of morphometric characters of various body parts. A detailed taxonomic study is carried out based on the various keys and catalogues and other relevant literatures.

OBSERVATIONS AND RESULTS

The specimens collected were only females and were studied under stereo zoom microscope and were found to be new species and are described as under.

2. *Oxyopes kohaensis* sp. nov.

General :— Cephalothorax and legs light yellowish green ; abdomen yellowish green. Total length 13.00mm; Carapace 4.00 mm long, 3.80 mm wide ; abdomen 8.50 mm long, 3.80 mm wide.

Cephalothorax :—Longer than wide, high, posterior, middle and lateral side provided with long conspicuous fovea above with two black bands, present, posterior middle and lateral sides of cephalothorax provided with fine pubescence. Eyes eight in compact group. Anterior row of eyes strongly recurved, medians very small, anterior laterals bigger in size, anterior medians closer to anterior laterals than to each other. Posterior row of eyes procurved, nearly equidistant to each other. All the eyes except anterior median encircled by black patches and equal in size. Clypeus long, black longitudinal band started from anterior median eyes up to the fangs of chelicerae. Labium and maxillae longer than wide clothed with spine like hairs. Anterior end of maxillae provided with scopulae. Chelicerae strong, inner and outer margin provided with one and two dissimilar tooth respectively. Sternum heart shaped, pointed behind, clothed with long spine like hairs. Legs long and strong clothed with hairs and conspicuous spines.

Abdomen :— Longer than wide, narrow posteriorly middle of abdomen provided with dark orange-yellowish longitudinal band, starting from anterior and up to the base of spinnerets, laterally provided with some black patches and in between, the two, mid lateral silvery white bands. Ventral side slightly lighter than dorsal,

two longitudinal brownish bands, starting from epigastric furrow up to the base of spinnerets. Internal genitalia as in Fig.2b.

Type specimen :- Holotype female in spirit.

Type locality :- India, Maharashtra, Koha village Distt. Amravati.

2. *Oxyopes boriensis* sp. nov.

General:-Cephalothorax light yellowish green, legs dark yellowish green; abdomen light yellowish green. Total length 10.00 mm. Carapace 3.50 mm long, 3.00 mm wide; abdomen 6.00 mm long, 2.80 mm wide.

Cephalothorax :-Longer than wide, narrowing in front, provided with light reddish patches laterally and mid-dorsally. Cephalic region high, clothed with pubescence. Posterior half with long, conspicuous fovea. Eyes eight in compact group. Anterior row of eyes strongly recurved, anterior medians smaller than the anterior laterals and closer to lateral than to each other. Posterior row of eyes strongly procurved, equal in size and equidistant from each other. All the eyes are encircled by black patches. Clypeus long, provided with few spine like hairs and with black band, starting from anterior median eyes up to the fangs of chelicerae. Sternum heart shaped, pointed behind, clothed with spine like hairs. Labium and maxillae dark brown in color, longer than wide, anterior end of maxillae provided with conspicuous scopulae. Chelicerae moderately strong, vertical, reddish-green, inner and outer margin provided with one bigger and two dissimilar teeth respectively. Legs long and strong, clothed with hairs and long conspicuous spines. Femurs of all legs provided ventrally with two black bands. Tibia IV' posteriorly provided with black band.

Abdomen :- Longer than wide, narrowing behind, laterally provided with one continuous black band and other in dis-continuous black band, mid-dorsally longitudinal broad dark reddish band. Ventral side lighter than dorsal, mid-ventrally provided with broad black band starting from epigastric furrow up to the base of spinnerets. Internal genitalia as in Fig.2e.

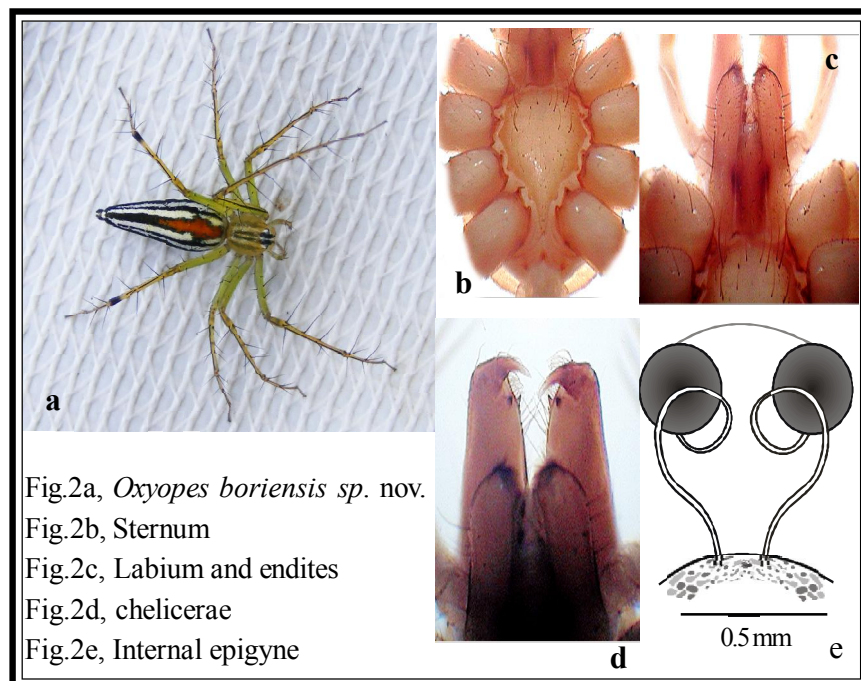
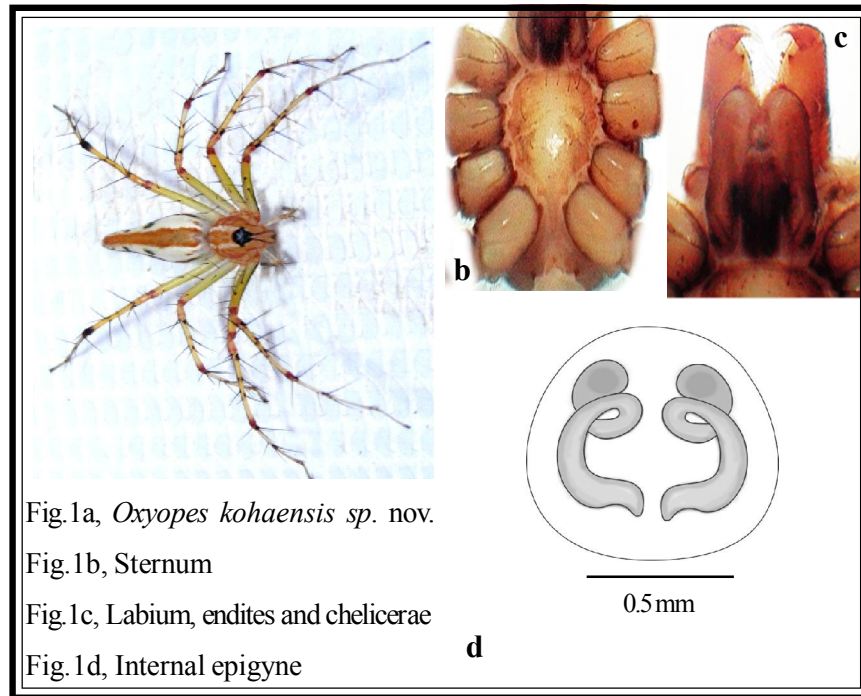
Type specimen :- Holotype, female, Paratype one female in spirit.

Type locality :- India, Maharashtra, Bori village Distt. Amravati

DISCUSSION

Oxyopes kohaensis closely resembles *Oxyopes chittrae*, Tikader but differs from it as follows : (i) Cephalothorax provided with just above the fovea two black bands but in *O. chittrae*, Tikader cephalothorax provided with mid dorsal and lateral bands (ii) Abdomen laterally provided with black patches but in *O. chittrae* abdomen provided with dorsally conspicuous deep brown longitudinal bands. (iii) Epigyne and internal genitalia also structurally different. The epigynum also resembles with that of *Oxyopes decorosus*, Zhang and Zhu, 2004, particularly with respect to the spermathecal duct and small oval spermatheca.

Oxyopes boriensis resembles *Oxyopes kusumae*, Gajbe but differs from it, as follows – (i) Cephalothorax with light reddish patches but in *O. kusumae* cephalothorax provided with some deep brown special type of blunt or spatulate



hairs. (ii) Femur of all legs provided with two black bands and Tibia of IV leg with black band but in *O. kusumae* legs uniform in color, without any patch or band. (iii) Abdomen is laterally provided with one continuous black band. In *O. kusumae* abdomen mid-dorsally provided with two silvery white strips. (iv) Epigyne and internal genitalia are also structurally different.

The type specimens at present are deposited in Arachnology Museum, Department of Zoology, Sant Gadge Baba Amravati University, Amravati.

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